

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CXXXIX.

A NEW GENUS, ARISTEGUIETIA.

R. M. King and H. Robinson

Department of Botany

Smithsonian Institution, Washington, D.C. 20560

The new genus described here constitutes a series of Critonioid Eupatorieae widely distributed in the Andes of South America from Colombia south to Chile, with the center of diversity in Ecuador and Peru. The genus has the basic simple style and smooth corolla lobes but also shows strongly subimbricate often reddish phyllaries which are mostly persistent, and in all but one species the style appendages are broad and flattened throughout their length. The phyllaries are reminiscent of some Ayapanoid genera in which they are prominently multiseriate but only the innermost are deciduous. The Aristeguietia series is further distinguished by the achenes being scabrid or setiferous but never glanduliferous, by the carpodium being short and poorly delimited above with small cells continuing along the ribs, by the scarcely spreading pappus setae, and by the mostly ascending and alternate branching of the inflorescence. More distantly related Andean genera share the broad style branches but differ by their glanduliferous achenes, the more prominent or more sharply demarcated carpodia, the usually more spreading pappus setae, the more deciduous phyllaries and the usually more spreading often prominently paired branches of the inflorescence.

Aristeguietia has some variation in leaves but most forms have slightly to strongly bullate upper surfaces and the margins are usually densely crenate to dentate with scarcely any inclination toward serrate. A few more southern members of the group have only crenulate margins or margins incurved and essentially entire. The leaves have two basic shapes, with cordate bases, or without cordate bases but with closely pinnate venation.

In floral structure the proper relationships within the group seem evident. Most of the species have glabrous corolla lobes or rarely show a hair or gland. Only A. chimboracensis of the more typical species seems to regularly have a few hairs or glands on the corolla lobes. Pubescent lobes are characteristic of some more peripheral members of the group.

In southern Peru the two species with narrow and entire-margined leaves have numerous small glands on the corolla lobes. At the northern limits of the alliance in Colombia there are two distinct variants. The first A. lamiifolia which has prominent hairs and some glands on the corolla lobes and a strongly conical receptacle. The second A. perezioides has small glands on the corolla lobes and differs from all other members of the series by its narrow style branches. Though the style of A. perezioides presents problems for keys the relationship of the species is clear. Because of the wider distribution of the broad style in Andean genera, and because of the rather specialized nature of Aristeguietia, the style condition of A. perezioides seems best interpreted as a regression.

The genus is named after Dr. Leandro Aristeguieta of the Instituto Botanico in Caracas, Venezeula though the genus is not found in Venezeula.

Aristeguietia R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae suffrutescentes vel subarborescentes erectae vel procumbentes medio-criter ramosae. Caules teretes vel tetragonales vel hexagonales. Folia opposita petiolata; laminae late ovatae vel lineares base cordatae vel cuneatae margine plerumque dense crenulatae vel dentatae, supra vix vel valde bullatae subtus dense puberulae vel tomentosae glanduliferae. Inflorescentiae paucae vel multo capitatae, ramis plerumque ascendentibus base solum oppositis; squamae involucri ca. 25-70 multiseriatae valde subimbricatae inaequales plerumque persistentes extus multistriatae subcoriaceae; receptacula plana vel conica; flores 13-ca. 100; corollae anguste infundibulares extus et intus laeves, lobis longioribus quam latioribus extus plerumque glabris interdum piliferis vel glanduliferis; filamenta antherarum in parte superiore cellulis plerumque oblongis, parietibus distincte parum transverse annulatis; cellulae exotheciales subquadratae, appendicibus longioribus quam latioribus; styli inferne glabri non nodulosi, appendicibus plerumque perlati planis vel canaliculatis mamillatis. Achaenia scabrida vel setifera non glandulifera; 5-costata carpodia brevia superne non distincta in costis continua, cellulis parvis subquadratis vel oblongis, parietibus medio-criter incrassatis; setae pappi perdense subbiseriatae parum patentis scabrae apice non incrassatae plerumque angustae, cellulis apicalibus acutis vel subacutis. Grana pollinis 22-25 μ diam. minute spinulosa.

Species typica: Eupatorium salvia Colla

Our studies of the genus indicate that it contains the following twenty one species.

Aristeguietia amethystina (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium amethystinum B.L.Robinson, Contr. Gray Herb. n.s. 77:8. 1926. Ecuador.

Aristeguietia anisodonta (B.L.Robinson) R.M.King & H. Robinson, comb. nov. Eupatorium anisodontum B.L. Robinson, Proc. Amer. Acad. 55:6. 1919. Peru.

Aristeguietia arborea (H.B.K.) R.M.King & H.Robinson, comb. nov. Eupatorium arboreum H.B.K., H.B.K. Nov. Gen. et Sp. 4: 103. 1818, ed folio. Ecuador.

Aristeguietia ballii (Oliver) R.M.King & H.Robinson, comb. nov. Eupatorium ballii Oliver in Hook. Ic. Pl. t. 1462, third series, 5: 49. 1884. Peru.

Aristeguietia buddleaefolia (Benth.) R.M.King & H. Robinson, comb. nov. Eupatorium buddleaefolium Benth., Pl. Hartw. 135. 1844. Ecuador.

Aristeguietia cacalioides (H.B.K.) R.M.King & H. Robinson, comb. nov. Eupatorium cacalioides H.B.K., H.B.K. Nov. Gen. et Sp. 4: 101. 1818. Ed. folio Ecuador.

Aristeguietia chimborazensis (Hieron.) R.M.King & H. Robinson, comb. nov. Eupatorium chimborazense Hieron, Engl. Bot. Jahrb. 29:7. 1900. Ecuador.

Aristeguietia cursonii (B.L.Robinson) R.M.King & H. Robinson, comb. nov. Eupatorium cursonii B.L. Robinson, Proc. Amer. Acad. 42:38. 1906. Peru.

Aristeguietia dielsii (B.L.Robinson) R.M.King & H. Robinson, comb. nov. Eupatorium dielsii B.L. Robinson in Diels Bibl. Bot. 116: 159. 1937. Eupatorium salviaefolium H.B.K. not Eupatorium salviaefolium Sims. Ecuador.

Aristeguietia diplodictyon (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium diplodictyon

B.L.Robinson, Proc. Am. Acad. 54: 242. 1918.
Peru (Colombia by error).

Aristeguietia discolor (A.P.Decandolle) R.M.King & H.
Robinson, comb. nov. Eupatorium discolor A.P.
Decandolle, Prodr. 5: 161. 1836. Peru.

Aristeguietia gascae (B.L.Robinson) R.M.King & H.Rob-
inson, comb. nov. Eupatorium gascae B.L.Robinson,
Proc. Amer. Acad. 55:15. 1919. Peru.

Aristeguietia gayana (Wedd.) R.M.King & H.Robinson,
comb. nov. Eupatorium gayanum Wedd., Chlor. And.
1:216. 1855. Peru.

Aristeguietia glutinosa (Lam.) R.M.King & H.Robinson,
comb. nov. Eupatorium glutinosum Lam. Encyc. 2:
408. 1786. Ecuador.

Aristeguietia lamiifolia (H.B.K.) R.M.King & H.Robin-
son, comb. nov. Eupatorium lamiifolium H.B.K.,
H.B.K. Nov. Gen. et Sp. 4: 88. 1818 Ed. folio.
Colombia, Ecuador.

Aristeguietia perezioides (B.L.Robinson) R.M.King &
H.Robinson, comb. nov. Eupatorium perezioides
B.L.Robinson, Proc. Amer. Acad. 54:255. 1918.
Colombia.

Aristeguietia persicifolia (H.B.K.) R.M.King & H.Robin-
son, comb. nov. Eupatorium persicifolium H.B.K.
H.B.K. Nov. Gen. et Sp. 4:102.1818. Ed. folio.
The name is often misapplied to A. discolor of
Peru. Ecuador.

Aristeguietia pseudarborea (Hieron.) R.M.King & H.
Robinson, comb. nov. Eupatorium pseudarboreum
Hieron., Engl. Bot. Jahrb. 36:469. 1905. Peru.

Aristeguietia salvia (Colla) R.M.King & H.Robinson,
comb. nov. Eupatorium salvia Colla, Mem. Acc.
Tor. 38:8. 1835. Chile.

Aristeguietia tahonensis (Hieron.) R.M.King & H.Rob-
inson, comb. nov. Eupatorium tahonense Hieron.
Engl. Bot. Jahrb. 40: 372. 1908. Peru.

Aristeguietia tatamensis (B.L.Robinson) R.M.King & H.
Robinson, comb. nov. Eupatorium tatamense B.L.
Robinson, Contr. Gray Herb. n.s. 77:41. 1926.
Colombia.